

M/021/008

0002

[deseretnews.com](http://deseretnews.com)

## Business

Sunday, February 25, 2001

**Related content:**

[Wind farms unlikely to sprout in Utah](#)



Format story for printing



E-mail a copy of this story

### A 'home run' for Geneva Steel?

**By Brice Wallace**

Deseret News business writer

VINEYARD — Uh-oh. A new \$400 million project at Geneva Steel Co.? Probably something big, dirty and sucking up scarce electricity, huh?

Think again.

Construction could begin soon on the project, which uses new ironmaking technology that would cut down on environmental emissions, put to use more Utah coal and ore and provide surplus electricity.

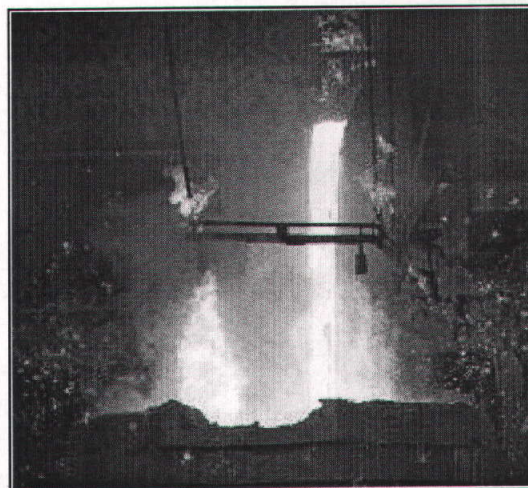
"It's hard to find something bad about the project benefits," said Ken Johnson, Geneva executive vice president. "This kind of ironmaking would be a financial and environmental 'home run' for the company."

The \$400 million project, boosted by a \$150 million grant, could be operational in a couple of years. It would use technology called HIs melt, which converts iron ore to liquid pig iron through the injection of non-coking coal and fine iron ore into a molten iron bath. The process eliminates the need for coke ovens.

"We have three blast furnaces but only operate two at a time typically," Johnson said. "This would be the first step in eliminating blast furnaces in coke ovens at Geneva."

The HIs melt technology is owned by Rio Tinto, the parent company of Kennecott Utah Copper. Rio Tinto has spent about \$600 million perfecting HIs melt, including the building of a pilot plant near Perth, Australia.

The Geneva facility would be the second and would be a larger, commercial-scale plant. Geneva engineers have spent months in Australia becoming familiar with the technology, and the company has tested some of the raw materials at the pilot plant.



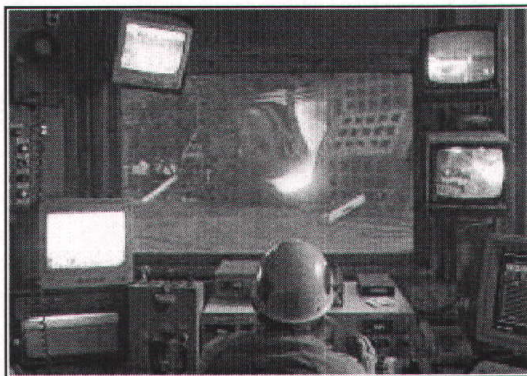
Molten iron pours out of a blast furnace at Geneva Steel. Work on a \$400 million project could start soon.

0002



Those raw materials include southern Utah ore and coal from Utah and Colorado. "It turns out this technology for clean ironmaking is very well suited for those raw materials," Johnson said. "It's a great opportunity for us to lower our costs by shifting from Eastern and Midwestern raw materials to Western raw materials."

That would mean reopening an Iron County ore mine the company owns and buying coal in the Carbon County area — potentially 900,000 tons per year.



Sitting in a computerized control room, Geneva Steel employee Lawrence Windley charges one of the plant's Q-BOP vessels with molten iron.

As an added plus, the facility would produce an "off-gas" that has to be burned, "and the best way to do that is generating electricity," Johnson said. "We wanted to find a way to make iron, but this provides power on a very economical basis as well."

A co-generation facility would burn the off-gases to produce perhaps 180 megawatts of electricity. That's a huge boost from the 50 megawatts Geneva currently generates in steelmaking, which is short of the 80 megawatts it uses.

Geneva would use some electricity generated by the new technology and sell the rest into the wholesale grid,

where electricity is at a premium. The company has offered to make PacifiCorp a partner in the project.

PacifiCorp is exploring that option, according to spokesman Dave Eskelsen.

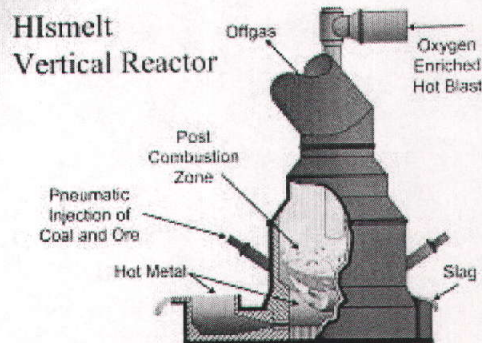
"We are interested in working with customers on self-generation. There are some things we could do," he said. "There would be probably about 80 megawatts of generating capacity that might be available for sale and use on the system generally."

Geneva is hoping to take advantage of Gov. Mike Leavitt's interest in fast-tracking electricity-generation projects through the permit processes. "This (project) can be completed faster certainly than any coal-based projects being discussed and probably gas-based ones as well," Johnson said.

Geneva has had plans for such a project for years, ever since it received a \$150 million Clean Coal Program grant administered by the U.S. Department of Energy. But implementation was delayed until the financially troubled company emerged from Chapter 11 bankruptcy, which occurred Jan. 3.

The company's board of directors will consider the proposal after the completion of a final feasibility study, but construction could begin this spring or summer. The company also is completing its environmental review and searching for a partner in the power-generation portion of the project.

Little would change regarding employment, except for the work forces at the coal and ore facilities, and the changes at Geneva's Vineyard plant probably





won't even be visible from Interstate 15, Johnson said.

But the changes nonetheless will be impressive. "The real benefit of this is that it has the raw-material characteristics of a coal-fired facility but the environmental emissions of a gas-fired facility. It's the best of both possible worlds: cheap fuel with low emissions."

In the long term, a second unit could be added and would take care of Geneva's current ironmaking needs.

"With two units operating here, it would eliminate the need for our coke batteries, which are the primary source of emissions at Geneva," Johnson said. "Having a second unit would depend on how successful the first unit is."

---

*E-mail: [bwallace@desnews.com](mailto:bwallace@desnews.com)*

---

[World & Nation](#) + [Utah](#) + [Sports](#) + [Business](#) + [Opinion](#) + [Olympics](#) + [Front Page](#)

© 2001 Deseret News Publishing Company